

I claim:

1. An airless atomizing nozzle, comprising:
  - a) a tubular body including a bore having an inlet and  
5 an outlet;
  - b) said body including a first face disposed at said  
outlet;
  - c) a cylindrical member including a second face and a  
cylindrical delivery channel secured at said outlet, said  
10 delivery channel having substantially uniform diameter;
  - d) said delivery channel including a tapered inlet and  
an outlet terminating at said second face; and
  - e) a pin including a target area spaced from and  
directly over said delivery channel outlet.
- 15 2. An airless atomizing nozzle as in claim 1, wherein said  
second face is flush with said first face.
3. An airless atomizing nozzle as in claim 1, wherein said  
second face is recessed with respect to said first face.
4. An airless atomizing nozzle as in claim 1, wherein said  
20 second face is raised above said first face.
5. An airless atomizing nozzle as in claim 1, wherein said  
member is made of borosilicate glass.
6. An airless atomizing nozzle as in claim 1, wherein:
  - a) said body includes an inwardly projecting first  
25 shoulder in said bore; and
  - b) said member includes a complementary inwardly

projecting second shoulder that engages said first shoulder.

7. An airless atomizing nozzle as in claim 1, wherein said pin is secured to said body with adhesive.

8. An airless atomizing nozzle as claim 7, wherein said  
5 adhesive is UV curable.

9. An airless atomizing nozzle as in claim 1, wherein said pin is made of stainless steel.

10. An airless atomizing nozzle as in claim 1, wherein said pin is U-shaped.

11. An airless atomizing nozzle as in claim 1, wherein  
10 said body includes outside threads for securing to a source of water to be atomized.

12. An airless atomizing nozzle as in claim 1, wherein said body is made of stainless steel.

13. An airless atomizing nozzle, comprising:  
15

a) a tubular body including a bore having an inlet and an outlet;

b) said body including a first face disposed at said outlet;

20 c) a member including a second face and an orifice secured at said outlet;

d) a pin including a target area spaced from and directly over said delivery channel outlet; and

e) said pin is secured to said body with UV curable  
25 adhesive.

14. An airless atomizing nozzle as in claim 13, wherein:

a) said body includes a lip disposed at the periphery of said bore outlet;

b) said member is supported by said lip.

15        15. An airless atomizing nozzle as in claim 14, wherein said member is secured to said lip by crimping a portion of said bore outlet disposed above said lip toward said orifice member.

16. An airless atomizing nozzle as in claim 14, wherein said member is secured to said lip by adhesive.

10        17. An airless atomizing nozzle as in claim 16, wherein said adhesive is UV curable.

18. An airless atomizing nozzle as in claim 13, wherein said member is cylindrical including a delivery channel including a tapered inlet and an outlet terminating at said orifice.

15        19. A method for aligning a target on a pin over an orifice in an airless atomizing nozzle body, comprising:

a) positioning the target over the orifice;

b) directing light through the orifice toward the target;

20        c) detecting light passing past the target;

d) re-positioning the target over the orifice until the light passing past the target substantially disappears; and

e) securing the pin to the nozzle body.

25        20. A method as in claim 19, wherein said securing is implemented with UV curable adhesive.

21. A method as in claim 19, wherein said directing light

is implemented with an optic fiber.

22. A method as in claim 19, wherein:

a) said orifice is provided by a micro capillary; and

b) said directing light is implemented with an optic  
5 fiber one end of which is supported by the micro capillary.

23. A method as in claim 19, wherein:

a) said detecting is implemented with a light  
detector; and

b) said positioning is implemented with a holding  
10 mechanism connected to the light detector.